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(21) International Application Number: PCT/US97/00682 (22) International Filing Date: 22 January 1997 (22.01.97) (30) Priority Data: 08/595,037 31 January 1996 (31.01.96) US (71) Applicant: CABOT CORPORATION [US/US]; 75 State Street, Boston, MA 02109-1806 (US). (72) Inventor: SANT, Ravindra; Apartment E7, 2600 North Hobart Street, Pampa, TX 79065 (US). (74) Agent: CAIRNS, James, A.; Cabot Corporation, 157 Concord Road, P.O. Box 7001, Billerica, MA 01821-7001 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.
(54) Title: CARBON BLACKS AND COMPOSITIONS INCORPORATING THE CARBON BLACKS		
(57) Abstract New classes of carbon blacks which may be broadly characterized as having an Iodine adsorption number (I₂No.) of 50-112 milligrams/gram (mg/g) and a primary particle size measured in accordance with the procedures in ASTM Test Procedure D3849-89 (hereinafter denoted as "primary particle size") of less than or equal to 25 nanometers (nm). Certain of the carbon blacks of the present invention may be further characterized as having a CDBP (dibutyl absorption value of the crushed carbon black) of less than or equal to 102 cubic centimeters DBP per 100 grams of carbon black (cc/100g). The present invention provides carbon blacks having I₂No. of 65-95 mg/g and a primary particle size of less than or equal to 20 nm. Also disclosed and claimed are carbon blacks having an I₂No. of 100-112 mg/g and a primary particle size of less than or equal to 20 nm. The present invention further provides carbon blacks having an I₂No. of 65-112 mg/g; a primary particle size of less than or equal to 20 nanometers (nm); and a CDBP (dibutyl absorption value of the crushed carbon black) of less than or equal to 102 cubic centimeters DBP per 100 grams of carbon black (cc/100g). In addition, carbon blacks having an I₂No. of 50-70 milligrams/gram (mg/g) and a primary particle size of less than or equal to 25 nm, are disclosed and claimed. The present invention also provides carbon blacks having an I₂No. of 50-85 mg/g; a primary particle size of less than or equal to 25 nm; and a CDBP of less than or equal to 96 cc/100g. The carbon blacks are particularly well suited for use in the production of polymer compositions. Also described and claimed are polymer compositions incorporating the new carbon blacks.		